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April 20, 2001

94-129

Yog R. Varma
Deputy Chief
Common Carrier Bureau
Federal Communications Commission
445 Twelfth St., SW
Washington, DC 20554

Dear Mr. Varma

On August 15, 2000, the FCC released its *Third Report and Order and Second Order on Reconsideration*, In the Matter of Subscriber Carrier Selection Changes of the Telecommunications Act of 1996, Policies and Rules Concerning Unauthorized Changes of Consumers Long Distance Carriers, CC Docket 99-129. In that Order, the Commission requested the North American Numbering Council (NANC) to provide analysis and recommendations on whether the Commission should require switchless resellers to obtain and use their own Carrier Identification Codes (CICs) to address soft slamming related problems.

Attached is a report from the NANC providing analysis and recommendation on this issue. The report was approved, without dissent, at the April 2001 NANC meeting.

Yours Truly,

NANC Chair

0+1

CIC IMG

Analysis and recommendation on the adoption of a switchless reseller CIC requirement to address "soft slamming"

Report to the NANC

April 17, 2001

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Section 1.0 Introduction

The FCC released its *Third Report and Order and Second Order on Reconsideration,* In the matter of Implementation of the Subscriber Carrier Selection Changes of the Telecommunications Act of 1996, Policies and Rules Concerning Unauthorized Changes of Consumers' Long Distance Carriers, CC Docket 94-129, on August 15, 2000. In paragraphs 24 and 31, the North American Numbering Council (NANC) was requested to provide analysis and recommendations on whether the Commission should adopt a requirement that switchless resellers obtain and use their own Carrier Identification Codes (CICs) to address "soft slamming" and related carrier identification problems.

Specific direction on the NANC task was then given by Yog Varma, Deputy Chief of the Common Carrier Bureau, to NANC Chairman John Hoffman in a letter dated September 12, 2000. The CCB requested that specific aspects of the CIC issue be addressed. At the September 20 NANC meeting, a Carrier Identification Code Issues Management Group (CIC IMG) was formed to complete this task. A report is due to the Commission by August 1, 2001.

An extensive record has already been developed in this Docket, and also in Docket 92-237; both have sections specific to CICs. Of special note is the February 5, 1998 NANC recommendation to the FCC under Docket 92-237. The IMG urges the Commission to also consider those comments due to wide industry representation.

Section 2.0 Background[1]

CICs provide routing and billing information for calls from end users via trunk-side connections to interexchange carriers and other entities. Entities connect their facilities to access provider's facilities using several different access arrangements, the common ones being Feature Group B (FG B) and Feature Group D (FG D). CICs were introduced in 1981 as 2-digit codes and then were expanded to 3-digit codes in 1983. At that time CICs were assigned from a single pool of numbers serving both FG B and FG D access. Initially, entities could be assigned up to a maximum of three CICs, a primary and two supplemental CICs. When it was recognized that the supply of 3-digit CICs would eventually exhaust, the Interexchange Carrier Compatibility Forum (ICCF) developed a plan to expand the resource to 4 digits, i.e., CIC expansion. In 1989, when the 700th CIC was assigned, the industry agreed to limit assignments to one per entity to prevent exhaust before completion of CIC expansion.

CIC expansion was implemented in two phases. Phase 1 was completed on April 1, 1993, at which time FG B and FG D CICs were split into two separate assignment pools. In addition, the FG B resource was expanded from 3 to 4 digits. FG D CICs continued to be assigned in the 3-

[1] CIC Assignment Guidelines, INC 95-0127-006, dated January 8, 2001

digit format until exhaust signaled the start of Phase 2. Phase 2 of CIC expansion was completed on April 1, 1995 when FG D CICs were expanded to 4 digits. Existing 3-digit FG D CICs were converted to 4 digits by prepending a "0" in front of the CIC. After Phase 1, but before Phase 2 of CIC expansion, entities could reserve a 4-digit FG D CIC in advance to match an assigned 4-digit FG B CIC. The CIC guidelines have been modified to reflect the completion of CIC expansion and the availability of 4-digit CICs.

CICs are 4-digit numeric codes that are currently used to identify customers who purchase Feature Group B (FG B) and/or Feature Group D (FG D) access services. These codes are primarily used for routing from the local exchange network to the access purchaser and for billing between the LEC (local exchange carrier) and the access purchaser.

In addition to those CICs assignable by the CIC administrator, there are 200 four-digit CICs (9000-9199) designated for intranetwork use and therefore not assignable by NANPA.

These 9000-9199 CICs are deemed 'administrative' because they are:

1) intended for intranetwork use only,
2) not intended to be used between networks
3) not intended to be dialable by end users as a Carrier Access Code (CAC)

Use of the 200 administrative CICs is at the discretion of each network provider and will not place requirements on other network providers.

In addition to the use of CICs by the LECs for routing and billing of access services, the CIC comprises part of the CAC, a dialing sequence used by the general public to access a preferred provider of service.

Specifically, the CAC can be in the following formats:

- For FG B, the CAC is in the format 950-XXXX, where XXXX is the FG B CIC.
- For FG D, the CAC is dialed using a 7-digit format (101XXXX), where XXXX is the FG D CIC.

Section 3.0 Definitions

The CIC IMG used these definitions to develop this report:

Slamming--The FCC has defined "slamming[2]" as the unauthorized change of a subscriber's preferred carrier.

Soft Slamming--The FCC has defined "soft slamming[3]" as the unauthorized change of a subscriber from its authorized carrier to a new carrier that uses the same CIC. Because the change is not executed by the LEC, which continues to use the same CIC to route the subscriber's calls, a soft slam bypasses the preferred carrier freeze protection available to consumers from LECs. Carrier misidentification occurs because LECs also identify carriers by their CICs for billing purposes. A LEC call record therefore is likely to reflect the identity of the underlying carrier whose CIC is used, even if the actual service provider is a reseller.

Section 4.0 Responses to Common Carrier Bureau Areas of Concern

In its letter dated September 12, 2000, the CCB requested that NANC look into specific areas of concern related to switchless resellers and CICs. The IMG formulated these concerns into questions. The intent was to be clear and concise in response. (The only CICs considered in this report are Feature Group D CICs.)

4.1 What measures would increase the effectiveness of a reseller CIC requirement in the prevention of soft slamming?

For the CIC reseller requirement to be effective, it must apply to all resellers. The reseller CIC requirement is effective only if changes in the entity that serves the customer must result in a presubscribed interexchange carrier (PIC) change ordered through the customer's local exchange carrier. It is the control of a CIC change that could help deter soft slamming. Thus, if a reseller is in turn the customer of another reseller, who is the customer of a facilities-based IXC, each of the resellers must have its own unique CIC. Otherwise soft slamming can still take place between resellers who provide service through the same entity that interacts with the facility-based carrier.

[2] FCC 00-135 CC Docket 94-129 Released May 3, 2000 First Order on Reconsideration
[3] FCC 00-255 Third Report and Order and Second Order on Reconsideration Released: August 15, 2000

4.2 What are the impacts, both positive and negative, of a reseller CIC requirement on the carrier industry?

A potential positive impact of a reseller CIC requirement would be the anticipated reduction of consumer complaint phone calls. Customers would know to call either their original provider or the new provider. Soft slamming would be reduced/eliminated because of PIC freeze, but 'hard' slamming would not be affected. This still does not solve the underlying issue: illegal behavior by some carriers. The CIC requirement would also make the hard slam easier to detect.

The negative impacts to the industry are:

- Increased cost to resellers. CIC activation charges levied by the LECs to the IXCs would be passed through (and perhaps increased) to the resellers. Many resellers take service from several IXCs.
- Acceleration of CIC exhaust. The reseller community is almost as large as the approximate FG D base (<1050 vs. 1290[4]). The assumption is that the CIC resource would therefore exhaust twice as fast if resellers were required to obtain CICs.
- Switch limitations. Per the chart in Section II-D, eight of the twelve switches identified do not have enough capacity to support even two CICs per entity with CIP. The four remaining switches have CIC measurement limitations.
- Disproportionate burden on the LECs. Not only would switch upgrades for CIC capacity fall on the LECs, so too would the overwhelming onslaught of CIC orders from IXCs. Provisioning projects would have to be established to handle the influx of orders due to a new FCC requirement.
- Many IXC switches and systems will also require modifications.

4.3 What are the potential financial burdens on switchless resellers and any potential competitive consequences? Should such financial burdens be mitigated?

The following information has been obtained from the tariffs filed by each LEC and reflects the costs that switchless resellers must bear for each CIC that is activated and again when they change wholesale providers. Resellers may also incur charges from their underlying IXCs that are not reflected in the chart below.

[4] The 1290 total represents an approximate number and should only be referenced as an approximation.

LEC Company	CIC Order Charge* (per Switch)	CIC Translation Charge* (per Switch)	Translation Parameters
Alltel	$ 71.00		
Ameritech	$ 50.00	$ 25.00	per CIC, Trunk, EO and Tandem
Verizon (Bell Atlantic - North)	$ 1.00	$ 1.00	per CIC, per trunk group (excludes CICs associated with 900 NXX Access Service)
Verizon (Bell Atlantic – South)		$ 50.00	per Trunk, Trunk group, EO, and Access Tandem
Bell South	$ 92.00	$ 62.00	per EO and Tandem office affected
Verizon (GTE)	$ 100.00		
Independents (NECA)	$ 81.00	N/A	
Nevada Bell			No Charge
Pacific Bell			No Charge
SWBT (To Change)		$ 91.79 $ 75.04 $ 91.79	1st End Office Add'l End Office per Tandem
SWBT (To Establish or Add)		$ 31.24 $ 22.86 $ 31.24	1st End Office Add'l End Office Per Tandem
US West/Qwest	N/A	$ 206.14 $ 21.32 $ 204.66 $ 20.17	1st line or trunk (for DS1) each add'l line or trunk (for DS1) 1st line or trunk (for DS3) each add'l line or trunk (for DS3)

* Tariff rates as of August 2000

There are additional business costs a reseller would bear with a mandatory CIC requirement.

Examples of these costs are:

- securing access to the Local Exchange Routing Guide (LERG), including creating and maintaining a LERG feed to stay current with LERG updates
- development of the in-house expertise required to write Access Service Requests (ASR) and navigate the ASR process
- development of an in-house LEC services group to facilitate assigning customers to the CIC

- establishing support systems to accommodate the changes noted above.

As an alternative to interacting with the LECs directly, a switchless reseller could have their IXC(s) work with the LECs to provision their CICs, as some resellers with CICs do today. The IXCs listed below have estimated deployment costs of a CIC nationwide that would be borne by a reseller under this scenario. Cost estimates, as provided by individual IXCs vary depending upon the configuration of their respective networks:

Global Crossing	$500,000
AT&T	$2,000,000 plus
WorldCom	$750,000 - $1,000,000 plus
Sprint	$650,000 - $750,000

A switchless reseller obtaining service from a single IXC would incur these costs. Switchless resellers with broader coverage using multiple IXCs would incur these costs from each IXC from which they obtain service.

In addition to the adverse financial impacts noted above, a requirement that all switchless resellers obtain CICs and deploy them throughout their respective service areas would also negatively impact the ability of such carriers to compete in the interexchange marketplace.

The costs associated with deploying a CIC would pose a significant barrier to entry for small businesses seeking to enter the market, particularly those relying on Internet-based marketing to reach a national consumer audience. For small carriers currently providing interexchange service, the cost of CIC deployment could force severe reductions in geographic service areas or compel exit from the market altogether. As reported by Association of Communications Enterprises (ASCENT), the majority of current non-facilities-based resale IXCs generate annual revenues of $10 million or less, with profit margins already severely depressed by intense competition.

Required use of a CIC would force substantial changes in the operations of switchless resellers. A switchless reseller compelled to deploy a CIC would either have to develop in-house switch provisioning experience or outsource the activity at still further cost. The abilities to obtain the information necessary to complete, write and submit access service requests, and to coordinate, test and complete translations are all skill sets that switchless resellers would have to secure. Likewise, because most IXC systems are set up to support their own CIC provisioning, switchless resellers would need to establish service groups to coordinate provisioning with local exchange carriers.

Initial deployment of a CIC on a broad geographic basis would take many months. Because most switchless resellers resell the services of multiple IXCs, the delays attendant to CIC deployment throughout a switchless reseller's service area would be experienced several times

over. These delays, coupled with the time required to develop the requisite switch provisioning and LEC coordination capability, would interfere with the conduct of the switchless resellers normal business, in particular its provisioning of new customers.

A mandatory CIC requirement will further limit the flexibility of switchless resellers to change underlying service providers. A carrier change can be accomplished by a wholesale service provider that shares its CIC with a switchless reseller simply through the submission of PIC change requests. Because the PIC change process is almost completely automated and based on industry standards, changing the PICs of switchless reseller customers can be accomplished within a matter of days by LECs with electronic systems and in roughly 30 days by smaller LECs relying on manual processes. In sharp contrast, CIC re-translations or re-directs necessitate use of the ASR process, which could take from several weeks to several months.

Because CIC re-translations are both time-consuming and costly (the cost of CIC re-translations being roughly comparable to initial CIC deployment), the need to re-direct a CIC as part of the process of changing carriers reduces the switchless reseller's negotiating leverage with its existing wholesale service providers. The extent of re-translation effort will depend on whether the translations can be solely accomplished at the tandem switch or will also require work at the at the end office switch. A facilities-based carrier knows that its switchless resellers must incur hundreds of thousands of dollars in cost and months of disruption to change carriers and would have limited incentive to compete vigorously with other potential network service providers on price.

This, of course, is not to suggest that there are no benefits associated with the use of CICs by switchless resellers. A CIC would enable the offering of services and features not available in a shared CIC environment, including dial-around service, dual-PIC service for local and long distance, and branded service from aggregator locations. For some carriers, these and other benefits have prompted the voluntary acquisition of CICs. Carriers that have not voluntarily deployed CICs have apparently determined that the financial and/or competitive costs of such deployment outweigh the benefits.

4.4 Would reseller CICs require LEC switch upgrades? What would be the time and expense of such upgrades? Are there ways to minimize the burden on LECs?

The majority of current LEC switches and CIC capacities are noted below, but the list does not capture all switch types. Vendor cost estimates, if known, are provided. A key point is that most vendors are not able to project costs until a customer requests specific upgrades/changes/capabilities. There would be additional LEC costs for implementation of hardware modifications and software upgrades to the switch.

Switch Type	Vendor	CIC Capacity	Upgrade Cost	Notes
1AES	Lucent	1,000		Manufacturer discontinued, no upgrades planned
4ESS	Lucent	10,000		Limited to 16 CICs per trunk group
5ESS	Lucent	10,000		Limit is 500 for measurements*
DCO	Siemens	R17.2 = 255 R17.3 = 9,999		
DMS 10	Nortel	255 2048 with R502, a/o 6-30-01	$8,000 per switch to upgrade from R501 to R502**	
DMS 100	Nortel	999		Vendor has no plans to increase
AXE	Ericsson	9,999		
EWSD	Siemens	R17.0 = 1,000 R18.0 = 10,000		*** R17.0 limit is 200 for measurements, R18.0 limit is 1,500
GTD5	AGCS/Lucent	500		
VIDAR	American Digital Switching	255		No plans to upgrade
MDX	Redcom	127		
MDXI	Redcom	500		

* CIC measurements in the Lucent 5ESS include Direct Incoming Call Attempts, Routed Direct Outgoing Call Attempts, and Routed Tandem Outgoing Call Attempts.
** This cost assumes the switch has already been upgraded to R501. If not, many additional costs would apply.
*** CIC measurements in the Siemens EWSD include number of Equal Access Calls, Equal Access Call Traffic Usage, and Overflows. It should be noted that in these two switches there is a stated CIC capacity, however only the number of CICs indicated (notes column) are capable of having measurements assigned.

4.4.1 Carrier Identification Parameter

Prevention of soft slams through the use of switchless reseller CICs is dependent on Carrier Identification Parameter (CIP). CIP is an optional feature on LEC switches to identify and transmit multiple CICs via the Signaling System 7 Initial Address Message (SS7 IAM) to a single underlying IXC trunk group. It is then up to the IXC and reseller to correctly bill the end user.

When a facilities-based IXC orders CIP from the LEC, the LEC end office or access tandem transmits the end user's presubscribed CIC or casually dialed CAC (101XXXX). CIP is provided per IXC trunk group, per switch, and usually has tariffed installation and monthly charges.

CIP requires signal transfer point (STP) access service as well as SS7-equipped FG D trunks. [5] On a simple trunk group, CIP service is usually activated in 5-10 working days. In a multi-state environment involving many trunk groups, implementation would be managed on a project basis.

There are limitations regarding CIP:

- Multi-frequency signaling is not supported
- 1AESS and 5ESS international calls can only be tracked to the underlying carrier
- Ericsson AXE is not supported
- DMS-10 switches that subtend DMS tandems are not supported
- Only applicable on LEC to IXC calls, not LEC to LEC

If CIP is not used, then a soft slam can still occur even if resellers are required to have CICs. Where the slamming carrier/reseller uses the same IXC as the end user customer's current carrier, no CIC change is necessary to have the calls routed to the IXC. The slamming carrier/reseller could simply notify the IXC that the customer has switched their account to the new (slamming) carrier/reseller and to send records for calls made with the customer's automatic number identification (ANI) to the new reseller for billing. The IXC would bill the new reseller wholesale charges and send call records to the reseller to use for end user billing.

The end user then receives a bill from the new reseller. Unless the IXC receives a CIC (via the CIP) they would not be aware that no PIC change had taken place with the originating LEC, and therefore they cannot detect the soft slam. If an IXC only sends records to the reseller based on CIP, or if they check ANI-based requests against the CIP received, soft slams cannot take place

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[5] Approximately 1,034 switches in the U.S. are not SS7 capable.
(Explanation: NECA is the only organization that tracks this information, and in their Access Market Survey Report conducted in 1999, in the universe of "traffic sensitive" NECA pool members, the total number of switches is 4,924, and 79% support SS7 signaling.). The IMG notes that many of these non-SS7 switches are likely to be in rural areas.

in the presence of a reseller CIC requirement. Where reseller billing is based on LEC-provided records, CIP is not required. This implies that to protect all customers, all LEC switches must be SS7-capable and must always forward the CIC in the CIP.

There are some benefits of sending CIC in the CIP beyond detection of soft slams. Having the CIC sent to the underlying IXC allows the reseller to avoid providing individual customer ANIs to the IXC; instead, they have records selected via CIC data received via CIP. Today, IXCs record usage by CIC where received and this capability would need to be expanded if a resellers were required to have CICs.

4.5 Would reseller CICs accelerate exhaust of the four-digit CIC pool and, if so, to what degree?

The way to approach this question is to first ascertain the universe of switchless resellers. There is no definitive source from which to obtain carrier statistics. ASCENT, the Association of Communications Enterprises, is a cross-industry group. In an effort to help the CIC IMG, ASCENT canvassed federal, state, and industry sources and evaluated the data received. The task was challenging due to wide variations between the sources cited. Then, using internal databases and organizational expertise, they tested the results with various members of the Association. ASCENT believes that there are approximately 1,250 to 1,500 IXCs operating in the United States, and that perhaps 70 percent (875 to 1,050) are switchless (non-facilities based) resellers. ASCENT also estimated that the average switchless reseller uses the network of three or four IXCs.

This is the best information available to the IMG. It is the basis on which the following CIC exhaust calculations were made.

Additional points considered in calculating CIC exhaust:

- 3-digit CICs are no longer assignable in the U.S.
- In the past year, an average of 24 CICs were assigned per month (under the current restriction of 2 per entity)
- There are 541 CICs remaining in the 5XXX and 6XXX ranges. Opening the additional CIC ranges would make an additional 6800 codes available.
- Based on the assignment rate and the restriction per entity, the currently open CIC ranges (0XXX, 5XXX, 6XXX) will exhaust by December 2002. This is without any requirement for switchless resellers to obtain CICs.

Taking into account the ASCENT study, the current assignment rate, the current restriction, a possible reseller requirement, raising the entity limit in increments from 2 to 6 for all entities, NANPA made exhaust predictions. Details of all scenarios can be found in Attachment B.

If both current FG D holders and switchless resellers were allowed (X) CICs each, it would cause an additional (X) CICs to be assigned by NANPA. The result on CIC exhaust is noted below. A range is given to account for the 875-1050 switchless resellers estimated by ASCENT.

(X) CICs per entity	Additional CICs assigned by NANPA	# CICs available with all ranges open	CICs Remaining
2	3040-3390	7341	3951-4301
3	5451-5976	7341	1365-1890
4	7882-8582	7341	Exhaust
5	10,316 - 11,191	7341	Exhaust
6	12,756 – 13,806	7341	Exhaust

- **Should the Commission eliminate or modify its current policy of restricting CIC assignments to two per carrier?**

Yes. Eliminate the current restriction and accept the previous NANC recommendation of 6 per entity.

- **Are there any other specific measures the Commission could take to ensure the availability and equitable distribution of CICs?**

Yes. Where state or federal regulations require a structural separation between separate companies within an entity, allow each company to be treated as its own entity for CIC assignments. Regulatory and structural separation means that one company cannot share the resources of another company within the same entity. This would ensure equitable distribution of CICs among companies needing the resource in order to conduct business.

4.6 When is the CIC resource likely to exhaust if all switchless resellers were required to use CICs?

The date of 'when' is not known, but it will be when each switchless reseller obtains 3-4 CICs as demonstrated in Section 4.5 above. Exhaust would be immediate if the average switchless reseller representing three or four carriers and current CIC holders were all permitted to have four CICs per entity.

Section 5.0 Conclusions and Recommendations

A requirement that switchless resellers obtain and fully deploy CICs is neither advisable nor effective as a means of preventing soft slamming. A mandatory CIC requirement would adversely impact every segment of the industry, unnecessarily speed the depletion of scarce numbering resources, dampen competition, hinder the participation of small business concerns in telecommunications, and reduce choice while increasing prices for consumers. Moreover, the effectiveness of a mandatory CIC requirement in preventing soft slamming is limited by technical constraints. Given what appears to be the relatively limited extent of the soft slamming problem, the industry costs associated with a mandatory CIC requirement for switchless resellers far outweigh the benefits.

Requiring approximately 1,000 switchless resellers to obtain CICs would necessitate the concurrent issuance and deployment of thousands of new codes. Depending on the number of CICs allocated to each entity, a mandatory CIC requirement would cause, or at least speed, the exhaust of the remaining 4-digit CIC pool. Implementing thousands of new CICs in all carriers' systems would place severe financial and operational burdens on local exchange carriers, straining personnel resources, delaying and otherwise interfering with other provisioning and operational activities, and, in many instances, require substantial capital investment to upgrade or replace existing switches and/or software. The burdens imposed on underlying IXCs with a mandatory CIC requirement would also be substantial. As the need to address myriad CIC deployments for wholesale customers multiplied, the result would be, in many instances, the modification of existing switching and billing systems, and the overburdening of LEC coordination resources.

The impact of a mandatory CIC requirement on switchless resellers would be particularly harsh. Given that the majority of switchless resellers are relatively small businesses, the imposition of hundreds of thousands, and often millions, of dollars of additional costs would likely force severe reductions in geographic service areas or compel market exit by existing providers, and certainly would constitute a significant barrier to new market entry. A mandatory CIC requirement would require substantial operational changes for switchless resellers, causing disruption, delay, and additional expense. Finally, because of the costs and delays association with CIC re-translations, a mandatory CIC requirement would diminish the leverage that switchless resellers have today when negotiating with their facilities-based network service providers.

Consumers would ultimately bear the increased carrier costs attendant to a mandatory CIC requirement. Consumer choice would also be adversely impacted by the likely reductions of switchless resellers and the dampening of price competition that would likely flow from a mandatory CIC requirement.

Apart from the adverse industry and consumer impacts of a mandatory CIC requirement, it is not clear that such a requirement would be effective in preventing soft slamming or that the soft slamming problem is of a magnitude sufficient to justify the costs. The effectiveness of a mandatory CIC requirement in preventing soft slamming is dependent in large measure on the availability and use of CIP and there are significant limitations on both. While quantification of the extent of soft slamming is not possible, it likely constitutes a relatively small portion of total slamming activity. This is because soft slamming not only requires knowledge of both the identity of the consumer's current carrier, as well as the specific CIC to which the consumer's traffic is being directed, but also the sharing of a CIC among the authorized and slamming carrier and hence. Carriers engaging in soft slamming, accordingly, are likely to be in the business of slamming, and hence among the frequent violators. Data published by the Commission suggests that the large majority of slams are perpetrated by fewer than three dozen carriers, two-thirds of which are already CIC-based.[6] It was the unanimous recommendation of the IMG that the imposition of a CIC requirement on switchless resellers which imposes substantial financial and operational burdens on the industry as a whole to address a problem confined to a relatively few would appear ineffective and inadvisable.

[6] Per the Federal Communications Commission's Common Carrier Scorecard and Long Distance Carrier Code Assignments.

Attachment A

John R. Hoffman
Chairman, North American Numbering Council
6607 Willow Lane
Mission Hills, Kansas 66208

Dear Chairman Hoffman:

The Commission has under consideration a proposal to require switchless resellers to obtain their own carrier identification codes (CICs) in order to address "soft slamming" and related carrier identification problems that arise from the shared use of CICs.[1] In the *Third Report and Order*, the Commission decided not to adopt such a requirement at the present time due to concerns regarding the potential impact on the carrier industry. The Commission stated in that order that it would refer issues regarding the proposal to the North American Numbering Council (NANC) for analysis and recommendations.[2] The Commission also stated its intention to reassess the proposal after receiving the NANC's report.[3] Accordingly, this letter refers the issues set forth below to the NANC for analysis and recommendations.

We request the NANC to provide its analysis and recommendations as to whether the Commission should adopt a requirement that switchless resellers obtain and use their own CICs to address "soft slamming" and related carrier identification problems. Specifically, the NANC should propose measures that would increase the effectiveness of such a CIC requirement in preventing soft slamming. Also, the NANC should address the impacts, both positive and negative, of a CIC requirement on the carrier industry.[4] For example, the NANC should consider the potential financial burdens on switchless resellers and any potential competitive consequences, as well as whether such financial burdens could be mitigated. The NANC should consider whether a CIC requirement would require LEC switch upgrades, the time and expense of such upgrades, and potential ways to minimize the burden on LECs. The NANC also should consider so, the

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[1] *See Implementation of the Subscriber Carrier Selection Changes Provisions of the Telecommunications Act of 1996, Policies and Rules Concerning Unauthorized Changes of Consumers' Long Distance Carriers*, CC Docket No. 94-129, Third Report and Order and Second Order on Reconsideration, FCC 00-225 (released August 15, 2000) (*Third Report and Order*), at ¶¶ 22-32.

[2] *See id.* at ¶ 31. The Commission also requested that "[t]o the extent possible, . . . the NANC submit any data it develops that may shed light on the financial and competitive issues discussed herein, as well as the dimensions of soft slamming and related problems." *Id.*

[3] *Id.* The Commission also noted that "[i]n the meantime, we anticipate that the reporting requirements we adopt herein will help to furnish us with more data as to the ongoing significance of the problems at issue and the impact of the Commission's recent anti-slamming and truth-in-billing measures." *Id.*

[4] *Id.* at ¶ 26; *see id.* at ¶¶ 27-29.

[6] *Third Report and Order*, FCC 00-255 at ¶ 31.

whether a CIC requirement would accelerate exhaustion of the four-digit CIC pool and, if degree to which it would do so. Related to that issue, the NANC should consider whether the Commission should eliminate or modify its current policy of restricting CIC assignments to two CICs per carrier, or take any other specific measures to ensure the availability and equitable distribution of CICs. We ask that the NANC address when this numbering resource is likely to exhaust if all switchless resellers are required to use CICs.

Pursuant to the Commission's request, we request that the NANC provide its report to the Chief of the Common Carrier Bureau by August 1, 2001.[6] We look forward to receiving the NANC's report and recommendations, and will give careful consideration to any consensus that develops through this process. Thank you in advance for your valuable assistance on these complex and important issues.

Sincerely,

Yog R. Varma
Deputy Chief
Common Carrier Bureau
Federal Communications Commission

cc: NANC Members
L. Charles Keller, Chief, Network Services Division
Diane Griffin Harmon, Deputy Chief, Network Services Division
Cheryl Callahan, Designated Federal Officer (DFO)
Jeannie Grimes, Alternate DFO

Attachment B

Date: 3/7/2001

Subject: Information Requested - Projected Exhaust of CIC Resource

From: Nancy Fears, CIC Administrator, NANPA

To: CIC IMG

PROJECTED EXHAUST BASED ON ASSIGNMENT STATUS AS OF 3/3/2001

"3-digit" CICs are not currently assignable to U.S. entities, so any unassigned CICs in this range are not calculated in this projected exhaust.

Based on information compiled over the past 12 months (March 2000 through February 2001), the average monthly number of FGD CIC assignments is 24.5 per month. Note that the current limit for assignments is 2 FGD CICs per entity.

37 FGD CICs are currently unassigned in the 5XXX range; 504 FGD CICs are currently unassigned in the 6XXX range (i.e., there are a total of 541 unassigned FGD CICs in the 5XXX/6XXX ranges as of 3/3/2001).

Based on the average monthly rate of assignment over the past 12 months, and considering the current limitation of "2 FGD CICs per entity", it is projected that the current ranges open for CIC assignment (5XXX/6XXX) will exhaust in 22 months (December 2002).

PROJECTED EXHAUST BASED ON CHANGED CIRCUMSTANCES

The following information is provided in response to the CIC IMG's request, with the following variables provided:

- Calculating the number of companies that now have CICs and expanding the limit each from 2 per entity in tiers to six 6 FGD CICs per entity; and
- If all thousand ranges are opened (1XXX, 2XXX, 3XXX, 4XXX, 7XXX, 8XXX and 9XXX excluding 9000-9199), an additional 6800 codes become available.
- Using the information provided by ASCENT indicating that roughly 875 (low estimate) to 1050 (high estimate) of its members are non-facilities based IXCs

Attachment B

For instance:

If the limit of FGD CICs per entity remains at 2, the following projected exhaust information is provided:

At present, there are approximately 1290 companies that have 1 FGD CIC assignment each. If each company requested 1 FGD CIC each to take them to the limit of 2 CICs per entity, there would be an additional demand for 1290 CICs.

If the lowest estimated number of switchless resellers (875) provided by ASCENT were to request 2 FGD CICs each, there would be an additional demand for 1750 CICs.

If the highest estimated number of switchless resellers (1050) provided by ASCENT were to request 2 FGD CICs each, there would be an additional demand for 2100 CICs.

TOTALS in 2 CICs per entity scenario: 1290+1750=3040
1290+2100=3390

If the limit of FGD CICs per entity was raised to 3, the following projected exhaust information is provided:

If each company that has 1 FGD CIC assignment (1290) requested 2 additional CICs to take them to the limit of 3 CICs per entity, there would be an additional demand for 2580 CICs.

At present there are approximately 246 companies that each have 2 FGD CIC assignments. If each company requested 1 FGD CIC to take them to the limit of 3 FGD CICs, there would be an additional demand for 246 CICs.

If the lowest estimated number of switchless resellers (875) requested 3 FGD CICs each there would be an additional demand for 2625 CICs.

If the highest estimated number of switchless resellers (1050) requested 3 FGD CICs each there would be an additional demand for 3150 CICs.

TOTALS in 3 CICs per entity scenario: 2580+246+2625=5451
2580+246+3150=5976

Attachment B

If the limit of FGD CICs per entity was raised to 4, the following projected exhaust information is provided:

If each company that has 1 FGD CIC assignment (1290) requested 3 additional CICs to take them to the limit of 4 CICs per entity, there would be an additional demand for 3870 CICs.

If each company that has 2 FGD CIC assignments (246) requested 2 additional CICs to take them to the limit of 4 CICs per entity, there would be an additional demand for 492 CICs.

At present, there are approximately 20 companies that each has 3 FGD CIC assignments. If each company requested 1 additional FGD CIC to take them to the limit of 4 FGD CICs, there would be an additional demand for 20 CICs.

If the lowest estimated number of switchless resellers (875) requested 4 FGD CICs each there would be an additional demand for 3500 CICs.

If the highest estimated number of switchless resellers (1050) requested 4 FGD CICs each there would be an additional demand for 4200 CICs.

TOTALS in 4 CICs per entity scenario: 3870+492+20+3500=7882
3870+492+20+4200=8582

Note: At the level of 4 CICs per entity, with all thousands ranges opened, the demand for the CIC resource has the potential to exceed the number of codes (6800 available from the new thousands ranges + 541 unassigned in the 5XXX/6XXX ranges as of 3/3/2001) available for assignment.

If the limit of FGD CICs per entity was raised to 5, the following projected exhaust information is provided:

If each company that has 1 FGD CIC assignment (1290) requested 4 additional CICs to take them to the limit of 5 CICs per entity, there would be an additional demand for 5160 CICs.

If each company that has 2 FGD CIC assignments (246) requested 3 additional CICs to take them to the limit of 5 CICs per entity, there would be an additional demand for 738 CICs.

If each company that has 3 FGD CIC assignments (20) requested 2 additional CICs to take them to the limit of 5 CICs per entity, there would be an additional demand for 40 CICs.

Attachment B

At present, there are approximately 3 companies that each has 4 FGD CIC assignments. If each company requested 1 additional FGD CIC to take them to the limit of 5 FGD CICs per entity, there would be an additional demand for 3 CICs.

If the lowest estimated number of switchless resellers (875) requested 5 FGD CICs each there would be an additional demand for 4375 CICs.

If the highest estimated number of switchless resellers (1050) requested 5 FGD CICs each there would be an additional demand for 5250 CICs.

TOTALS in 5 CICs per entity scenario: 5160+738+40+3+4375=10316
5160+738+40+3+5250=11191

If the limit of FGD CICs per entity was raised to 6, the following projected exhaust information is provided:

If each company that has 1 FGD CIC assignment (1290) requested 5 additional CICs to take them to the limit of 6 CICs per entity, there would be an additional demand for 6450 CICs.

If each company that has 2 FGD CIC assignments (246) requested 4 additional CICs to take them to the limit of 6 CICs per entity, there would be an additional demand for 984 CICs.

If each company that has 3 FGD CIC assignments (20) requested 3 additional CICs to take them to the limit of 6 CICs per entity, there would be an additional demand for 60 CICs.

If each company that has 4 FGD CIC assignments (3) requested 2 additional CICs to take them to the limit of 6 CICs per entity, there would be an additional demand for 6 CICs.

At present, there are approximately 6 companies that each has 5 FGD CIC assignments. If each company requested 1 additional FGD CIC to take them to the limit of 6 FGD CICs per entity, there would be an additional demand for 6 CICs.

If the lowest estimated number of switchless resellers (875) requested 6 FGD CICs each there would be an additional demand for 5250 CICs.

If the highest estimated number of switchless resellers (1050) requested 6 FGD CICs each there would be an additional demand for 6300 CICs.

TOTALS in 6 CICs per entity scenario: 6450+984+60+6+6+5250=12756
6450+984+60+6+6+6300=13806

Attachment C

The following list of IMG participants notes members who have participated in varying degrees over the course of development of this report.

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